

A METHOD AND APPARATUS FOR THROTTLING  
AUDIO PACKETS ACCORDING  
TO GATEWAY PROCESSING CAPACITY

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ABSTRACT OF THE DISCLOSURE

Rather than dropping packets, the invention throttles the rate that audio packets are output from a voice gateway by increasing the VoIP packet size. An encoder in the voice gateway encodes audio signals into audio packets. A processor in the voice gateway then switches the audio packets to the IP network.

10 The invention throttles the rate that these VoIP packets are switched from the voice gateway by varying the number of samples of the incoming audio signals that are encoded into each packet payload. By increasing the packet payload size in the VoIP packets, the voice gateway can switch the same amount of audio data in fewer VoIP packets. Producing fewer VoIP packets increases the available  
15 capacity of the voice gateway for processing audio signals for more calls. In other words, encoding more audio data into each VoIP packet keeps the voice gateway from having to drop packets. If capacity in the voice gateway increases (the number of incoming calls decreases), the voice gateway can resume generating VoIP packets at the original packet size.

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